aged 39 days (17 days for oncology and 14 days for orphan drugs). Across the EU5, Germany was fastest while Italy was slowest (16 vs. 66 weeks). Other factors considered included: UK reimbursement decisions by SMC and NICE often lengthened time to access; Germany: Time to market has increased by ~8 weeks since the 2011 introduction of AMNOG; Italy and France have special license programs which can shorten time to market for products addressing unique needs or populations; and In Spain commercialization of orphan and oncology drugs takes longer than general medications. **CONCLUSIONS:** Average time to market in the US vs. EU5 countries is considerably different. In the EU5, the German and UK launch on average were within 4 to 6 months of authorization; Italy was greater than a year. Launch times for orphan and oncology drugs also differ based on priorities set within health systems. Differences in country and product type have led to different market access timelines and regulatory changes will only increase these disparities.

PHP63

EFFECTS OF DRUG COST SHARING POLICY ON THE DRUG USE, FINANCIAL RISKS AND MORAL HAZARD FOR THE HEALTH INSURANCE BENEFICIARIES

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OBJECTIVES: To describe policies of drug cost sharing in health insurance schemes and how the authors have assessed the effects where available. **METHODS:** A systematic review was conducted in 2009 and updated in 2013. **RESULTS:** Totally 28 studies were included. 1) Some insurance schemes introduced a new drug cost sharing program, the increase rates of total number of prescriptions were smaller compared with the non cost-sharing group; At the same time, prescription drug cost sharing also decreased use of essential drugs or adherence to medications which induced adverse effects on vulnerable population such as the poor, the elderly and patients with chronic diseases. Average prescription cost increase rate was lower in the cost sharing group than the non cost-sharing group. 2) For Different Tiers of Prescription Copayment System, there were some positive effects showing that the consumption of generic drugs increased in both single-tired and three-tiered groups, especially higher proportion in the three-tiered system. Higher levels of prescription drug cost sharing actually decrease inappropriate drug use with a relatively inelastic price elasticity of demand. For the patients with chronic diseases such as heart failure or diabetes, lower adherence of medication followed by higher copayment would increase risk of hospitalization. Different levels of copayment could control moral hazard of the patients with decreased rates of switching to a relatively more expensive drug and an increased rate of switching to drugs of equal or lesser cost. 3) Increasing cost sharing level was followed by decreasing the utilization of prescription drugs and increasing in out of pocket especially for the vulnerable population. **CONCLUSIONS:** To increase or decrease the level of cost sharing could change the beneficiaries' behavior, the vulnerable population were more sensitive than the general. Different levels of cost sharing method seem as one of the successful tools to control moral hazard.

PHP64

AN ANALYSIS OF THE DRIVERS OF PRICING PREMIUMS GRANTED TO INNOVATIVE PRODUCTS IN JAPAN

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OBJECTIVES: The objective of this study was to identify key value drivers to achieve pricing premiums through the similar efficacy comparator pricing method for innovative products in Japan. **METHODS:** We analysed all products that were priced by the Central Social Insurance Medical Council (Chuikyo) using the similar efficacy comparator pricing method (I) from January 2010 to March 2014. Where relevant, the pricing premium and premium criteria met within each category were analysed in detail. **RESULTS:** Of 102 products assessed, 36 products (35%) were granted pricing premiums, which ranged from 5-50%. The most common premium category was utility (69%), followed by paediatric use (19%) and marketability (17%). Four products fell into two categories and were granted both pricing premiums. Of the seven orphan drugs assessed, six gained a 10% marketability (I) premium, while one achieved marketability (II) with only a 5% premium, as the orphan indication was not its main indication. Paediatric-use premiums ranged from 5-10%, with higher premiums dependent on unmet need and availability of similar therapies. 5-15% utility (II) premiums were achieved by products with improved MOA, efficacy, safety or therapeutic method. Only two products, fingolimod and telaprevir, were designated as utility (I) innovations, which qualified them for pricing premiums of 35-60%. Fingolimod was the first oral therapy approved to treat relapsing forms of multiple sclerosis. Its novel MOA, improved administration and efficacy, as well as an orphan indication, secured fingolimod a 50% pricing premium. Similarly, telaprevir was also valued by Chuikyo for its novel MOA and significant clinical improvement over the standard of care, resulting in a 40% pricing premium. **CONCLUSIONS:** Clinical benefit and unmet need are the main value drivers for premium pricing in Japan. To achieve >20% pricing premium, a product needs to meet at least two utility premium criteria to be categorized to utility (I).

PHP65

CHINA CRITICAL ILLNESS INSURANCE POLICY - THE RECENT DEVELOPMENTS AND PROSPECTS

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OBJECTIVES: China has a complex system to provide basic medical insurance (BMI) for over 95% population. However 35% of the total medical expense is out-of-pocket. To relieve people's burden, China implemented critical illness insurance from 2012. Critical illness insurance is based on BMI and aims to provide further protection for urban and rural unemployed residents. The article aims to summarize the plans of critical illness insurance from 24 provinces, to conclude the developments and prospects. **METHODS:** The 24 plans were published from October 2012 to December 2013. The participants of the insurance are urban and (or) rural residents. All plans determined that the payment amount will be segmented calculated. Besides, commercial companies are responsible to provide insurance. Thus the article summarizes and compares the financing level, deductible and cap lines. **RESULTS:** 18 provinces determined the financing level: 11 provinces were from 10 CNY to 60 CNY per capita annually; the rest equaled 5% to 10% of BMI premium. 22 provinces determined deductible: 15 provinces calculated deductible based on urban per capita disposable income (or rural per capita net income). 7 provinces determined cap line: 4 provinces were from 200 000 CNY to 400 000 CNY and the rest were no cap. **CONCLUSIONS:** 1. In all related provinces, the financing level is relatively low, while segmented calculation and the cap line lead to high payment. The main challenge is how to balance the income and expenditure of the insurance. 2. Since the central government did not define what critical illness insurance can reimburse, some provincial governments strictly control the range. In some other provincial governments, like Anhui, the range of the insurance is too wide. However, considering the insurer is commercial companies, the gaming between companies and governments will continue.

PHP66

WHY IT IS DIFFICULT FOR EUROPEAN TO UNDERSTAND THE CHINESE MARKET ACCESS PROCESS?

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OBJECTIVES: China is the third largest pharmaceutical market in the world. The aim of this study was to describe Chinese reimbursement process, assess current policies and provide the authors'view of Europeans difficulties to understand the Chinese market access. **METHODS:** A review was done using the latest-released official documents published by January 2014, to collect information regarding Chinese health care reimbursement pathways with the perspective of market access. Information was analysed based on authors'expertise, summarising the general pathway, and comparing with European routine. **RESULTS:** Three stakeholders participate in Chinese market access process: Ministry of Health (MoH) (supporting introduction of new health care technologies), National Development and Reform Commission (referencing prices based on technical information), and Bureau of Human Resources and Social Security (representing budget holders; focusing on cost containment). Differences between Chinese process and European routine result in European hardly understanding Chinese market access process: 1>in China, key opinion leaders introduce the dossier whereas in Europe, companies introduce the dossier. 2>in China, completely new health care technologies need real life pilot studies (RLPS) pre-requisitely to address the feasibility and impact of introduction, whereas in Europe, RLPS studies are requested after a granted market access. 3>in China, reimbursements start from regional level as pilot in 3 regions before becoming national whereas in Europe they start from national before regional contact. 4>in China, the three stakeholders negotiate internally reimbursements, prices and access conditions, whereas in Europe, companies negotiate with payers. 5>Chinese MoH has an envelope for direct funding of health care technologies through procurement, whereas no comparable envelope held by similar stakeholders in Europe. **CONCLUSIONS:** Chinese market access is difficult for European to understand because of fundamental differences in the paradigm sustaining pricing and reimbursement (P&R). Clarifying the rational for the differences in paradigm is a prerequisite for European understanding of the P&R in China.

PHP67

DEVELOPING A PATIENT CENTERED MODEL FOR CLINICIANS TO INDIVIDUALISE COST EFFECTIVE TREATMENT

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OBJECTIVES: The objective of this study was to develop a patient centred model which can be used by clinicians for each patient. **METHODS:** Two hypothetical, but realistic, treatments were selected to demonstrate the value of this model, a "modern atypical drug" and a "typical drug". The "modern atypical drug" is more expensive, results in faster return to work, less days in hospital and fewer repeat visits than the "typical drug". The computer based model provides default differences on all of these variables, however, the end user can over write these to allow the cost off-sets to be individualised to each patient they are treating. **RESULTS:** While the "modern atypical drug" is more expensive on a per day basis ($4.00 vs $0.30), days of treatment can be shorter, hospital stay and doctor visits reduced and days off work lower, making it a less expensive treatment option overall. In the base case, the medication cost of the "modern atypical drug" was $108 more expensive over the year of treatment ($4 per day x 30 days versus $0.30 per day x 40 days). Shorter length of stay (3 versus 10 days at $50 per day) resulted in $350 in savings. Modest savings were gained from fewer doctor visits. Substantial savings would be expected from fewer days off work (14 versus 45 days off work at $100 per day) with around $3,100 saved. Overall savings were $3,432. This model could be adjusted to reflect the expected outcome for each patient. **CONCLUSIONS:** This is exercise demonstrates a novel model design which allows doctors to assess individual patients to determine whether or not they should be considered for more expensive treatments. It is well suited to health care environments in the region.

PHP68

WHAT ARE THE KEY DRIVING FACTORS BEHIND RSA DECISIONS IN AUSTRALIA?

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OBJECTIVES: Risk sharing agreements (RSA) are sometimes used to offset the risk associated with any uncertainties which may surround a drug at the time of launch. They can offer payers and manufactures the flexibility to manage some of the perceived risks associated with, but not limited to, high therapy costs, discretionary use within an unapproved patient population, or lack of data at the time of product assessment. Given the frequent implementation of RSAs in Australia, the aim of

this study was to assess the trends which drive risk sharing agreements with the Pharmaceutical Benefits Advisory Committee (PBAC) within a four month period in 2013. **METHODS:** All PBAC decisions from August to November 2013 were surveyed by looking at the general RSA structures outlined in the PBAC guidelines. The following data were extracted from each appraisal: assessment outcome (positive or negative), RSA consensus (yes or no), RSA type (rebate and recovery, price volume, data provision, shared deeds), therapeutic area, product price, product incremental cost-effectiveness ratio, market size, structure of trial, trial outcomes, and the availability of alternative therapies. **RESULTS:** The analysis revealed that 44% of PBAC decisions incorporated some form of an RSA, and 91% of products with RSAs received a positive PBAC decision. The majority of RSAs were rebate recovery or price volume arrangements, where the PBAC was concerned with the product's use in a larger-than-specified population. **CONCLUSIONS:** The results of this study indicate the PBAC readily enters into RSAs when doubt exists surrounding the potential cost or efficacy of a drug. Accurately identifying areas of product risk and proposing an RSA to address it can lead to a favourable decision from the PBAC.

PHP70

CORRELATION OF RECENT HTA DECISIONS BETWEEN TAIWAN AND KOREA: IMPLICATION FOR LAUNCH STRATEGIES

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OBJECTIVES: The objective of this study was to compare the Health Technology Assessment (HTA) timing and decisions for recently launched products in South Korea and Taiwan, and to provide insight into launch strategies in these markets. **METHODS:** We analysed all products that were assessed for reimbursement by the Health Insurance Review & Assessment Service (HIRA) in Korea and by the National Health Insurance Administration (NHIA) and the Centre for Drug Evaluation (CDE) in Taiwan from January 2012 to March 2014. Where relevant, the details of the assessments have been extracted from the NHIA meeting minutes, CDE reports and HIRA reports. **RESULTS:** Since January 2012, 17 products were assessed by the reimbursement authorities in both Korea and Taiwan. 12 products received the same reimbursement decisions from both countries, while five products had divergent results. Of 12 products that received the same decisions, seven products were first assessed and reimbursed by Korea and then also reimbursed in Taiwan later, while only three products were first assessed and reimbursed by Taiwan and later followed by Korea. The other two products were assessed at the same time in both countries. Of five products that received different reimbursement decisions, two products were first assessed by Korea and Taiwan respectively, while the other product was assessed at the same time in both countries. Though the sample size is limited, these data suggest a possible positive influence of Korean HTA decisions on those in Taiwan. The average time difference between the Korea and Taiwan HTA assessments was 7.7 months, while Taiwan HTA assessments, on average, lagged behind Korea by 2.6 months. **CONCLUSIONS:** In general, Taiwan HTA assessments lag behind Korea by 2-3 months. This may result from a proactive launching strategy from manufactures, as HTA decisions made in Korea may have a positive influence on those in Taiwan.

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A CRITICAL REVIEW OF CHINESE PHARMACOECONOMICS STUDIES IN THE LAST FIVE YEARS

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OBJECTIVES: More and more papers about pharmacoeconomics and outcome research were published in China. The aim of this study was to evaluate the quality of Chinese pharmacoeconomics study and outcome research through analyze papers published in the peer-reviewed literature in Chinese over the last five years. **METHODS:** We conducted full-text paper searches in public databases from 2009 to 2013 in China. A search strategy and inclusion criteria were set up to identify the articles to be included. The search identified 820 studies, of which 411 were included. Then papers were evaluated through a framework which was based on Pharmacoeconomics guideline. **RESULTS:** Our results showed that a large number of published studies were of suboptimal quality. Most of pharmaceonomics and outcome research were conduct by doctors (33.6%) and pharmacists (54%) in China. Prospective studies (65.9%) were the most common study design, while most data were derived from the clinical trials; Only 8% of them included articles clearly stated the study perspective; More than half studies (56.2%) only computed drug expenditure in cost estimation; 2.2% of articles conducted discounting; 63.5% of studies performed the incremental analysis, however, most studies presented the cost-effectiveness ratios as incremental cost-effectiveness ratio; Sensitive analysis were reported by 71.3% of the included studies, nonetheless, the choice of variables for sensitivity analysis wasn't justified; A few studies (7.3%) presented the transferability of the results. **CONCLUSIONS:** The above data signify that the quality of pharmacoeconomic evaluations needs improvement. There were just few studies which had well-designed schemes, high-qualified data and suitable methodology, partly owing to the doctors and pharmacists' lack of pharmaceonomics expertise and knowledge. It implied China should improve the training of pharmaceonomics and outcome research training in doctors and pharmacists. Moreover, a further study of the new technology on pharmacoeconomy should not be neglected.

PHP72

APPLICATION OF THE METHODS OF EVIDENCE BASED MEDICINE FOR THE ANALYSIS OF EUROPEAN HEALTH SYSTEMS AND HEALTH POLICY APPROACHES

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OBJECTIVES: Evidence based medicine has been used for about two decades as methodology for obtaining, evaluating and presenting information on health related topics. The present study investigated the question of the appearance of the ideas of evidence based medicine in documents describing the functioning of European health care systems. **METHODS:** The documents available in the European Observatory on Health Systems and Policies database were considered to reliable represent the health system of European countries. Structured text analysis was carried out according to previously described methodology. All evaluation steps were carried out in parallel by two researchers (K.M. and Sz.L.). Two studies carried our previously on related topics were used to relate the results obtained in the present study with data of the literature. **RESULTS:** The cumulative length of the documents was 6449 pages; there was no document without mentioning the idea of evidence based medicine. Among the altogether 413 mentioning of evidence based medicine, we were able to categorise 208 representations of the idea into one of the following 4 topics: 1. resources of health care, 2. health technology assessment, 3. organisation of health care and 4. environment of health care within the society. Evidence based medicine was mentioned 57 in connection with the resources of health care, whereas 31 mentioning were related to health technology assessment. Organisation of health care was mentioned together with evidence based medicine at 56 occasions, whereas the idea of evidence based medicine was related to the social environment of health care in 64 instances. **CONCLUSIONS:** The results of the present data collection indicate that the methodology of evidence based medicine has already been widely used within the documents describing health systems and policies in Europe. However, there were considerably differences in the extent and depth of applying evidence based medicine methodology.

PHP73

PHARMACOECONOMICS AND ITS APPLICATIONS – EMERGING ROLE IN INDIA

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OBJECTIVES: Pharmacoeconomics is the application of economics to assess pharmaceutical and health care products that helps evaluate economic, clinical and humanistic outcomes of health care products and interventions. It gives health care decision makers, providers and patients with valuable information for optimal use and allocation of limited health care resources. In India, the awareness of pharmacoeconomics is relatively low among policy makers, academia and industry. As India's pharmaceutical market changes and evolves, the study of pharmacoeconomics and associated research is expected to gain momentum. **METHODS:** Secondary research was conducted using PubMed. Several search terms like "pharmacoeconomics", "cost minimization", "cost benefit", "cost utility", and "cost effectiveness" analysis were used. These terms were also used in different combinations, e.g., "Cost Minimization Analysis and Pharmacoeconomics and India", "Cost Benefit Analysis and Pharmacoeconomics and India", to extract relevant studies. No search term or time restrictions were applied while extracting studies. **RESULTS:** Overall, a total of 228 studies were extracted using the search terms. "Pharmacoeconomics and India" yielded 192 results out of which only five studies were relevant to pharmacoeconomics in India. Search terms "Cost Minimization Analysis and India and Pharmacoeconomics" gave only two results. Fifteen results were obtained for the term "Cost Benefit Analysis and Pharmacoeconomics and India" out of which four studies were relevant to the objective. "Cost Utility Analysis and Pharmacoeconomics and India" resulted in four results out of which two were repetitions of results from "cost minimization analysis". "Cost effectiveness analysis and pharmacoeconomics and India" resulted in 15 results; 10 in last 10 years and only 2 were relevant. **CONCLUSIONS:** As seen from the results, not much pharmacoeconomic research has been conducted in India suggesing the dearth of literature in this area in India. As the Indian pharmaceutical market evolves and policies change, greater amount and rigorous pharmacoeconomics research may be needed.

PHP74

FOSTERING PATIENT SAFETY CULTURE IN HOSPITAL TO IMPROVE HEALTH SERVICE: HOSPITAL SURVEY ON PATIENT SAFETY CULTURE

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OBJECTIVES: To explore the attitudes and perceptions of patient safety culture for health care workers in China by using a modified Hospital Survey on Patient Safety Culture (HSPSC) questionnaire. **METHODS:** The survey measuring 10 dimensions of patient safety culture with 36 items was conducted from 32 hospitals in 15 cities all across China. We computed descriptive statistics and Chi-Square test was performed to explore the differences on the perception of patient safety culture in groups of different work units, positions and qualification levels. SPSS 17.0 was used to perform data extraction and analysis. **RESULTS:** A total of 1500 questionnaires were distributed of which 1160 were responded validly (response rate 77%). Seven hundred and twenty two (66%) of the respondents were nurses, 386 (33%) were surgical clinicians and 343 (30%) were internal medicine clinicians. The positive response rate for the 10 patient safety culture dimensions ranged from 45% to 88%, the mean positive response rate was 65%. The lowest positive response rate of dimension was *"Staffing"* (45%), while the highest positive response rate of dimension was *"Organization Learning-Continuous Improvement"* (88%). The positive response rate of two dimensions of nurse was lower than that of physicians (*"Overall Perceptions of Patient Safety"* and *"Communication Openness"* $P < 0.05$). Furthermore, the positive response rate of physicians with high qualification (chief physicians) on two dimensions (*"Overall Perception of Patient safety"* and *"Feedback & Communication About Errors"* $P < 0.05$) was higher than those having a low qualification level (residents). **CONCLUSIONS:** The results show that amongst the health care workers surveyed in China there was a positive attitude towards the patient safety culture within their organizations.